



THE LONG ISLAND SOUND LICENSE PLATE PROGRAM NOTICE OF AVAILABLE FUNDS

January 8, 2008

The Department of Environmental Protection is pleased to announce the availability of funding through the Long Island Sound License Plate Program for projects promoting the preservation and restoration of Long Island Sound. This funding program has been made possible through the sale of Long Island Sound motor vehicle license plates, proceeds from the *Preserve the Sound* affinity credit card, and individual donations. The goal of this program is to stimulate public interest in Long Island Sound and to give the public the opportunity to participate directly in efforts to preserve and protect it.

Please Note: THERE ARE FOUR FUNDING CATEGORIES:

Public Outreach and Education
Public Access
Habitat Restoration
Research

- ◆ **PROPOSAL DEADLINE:** *MONDAY, MARCH 17 AT 4:30 P.M.*

AN ORIGINAL AND COMPLETE APPLICATION MUST BE RECEIVED AT THE DEP, OFFICE OF LONG ISLAND SOUND PROGRAMS LOCATED AT 79 ELM STREET, HARTFORD CONNECTICUT BY THE PROPOSAL DEADLINE. FAXED AND E-MAILED PROPOSALS OR LETTERS OF SUPPORT WILL NOT BE ACCEPTED.

- ◆ Applicants will be notified by June 30, 2008 as to whether or not their proposals have been selected for funding.

- ◆ **MAIL ORIGINAL AND 5 COPIES OF PROPOSALS TO:**

ATTN.: Kate Hughes Brown, LIS Fund Coordinator
Department of Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106-5127

FOR FURTHER INFORMATION, PLEASE CONTACT:

Kate Hughes Brown, LIS Fund Coordinator at (860) 424-3652
Or E-mail us at: kate.brown@po.state.ct.us

We look forward to receiving your proposals and making the Long Island Sound License Plate Program and the projects it funds, a success. Thank you for your interest and participation in the program.

PROGRAM PURPOSE

The Long Island Sound License Plate Program strives to support projects in the four funding categories for which funding is not otherwise available. Projects should be innovative, highly visible and directly related to Long Island Sound or its tributaries including its coves, embayments, harbors, tidal rivers and their associated habitats. The Department of Environmental Protection (DEP) is particularly interested in providing start-up funding for new programs or projects which have long-term benefits and impacts for the preservation of Long Island Sound.

AWARD PROCESS

Proposals received will be reviewed by the DEP and the Long Island Sound Fund Advisory Committee and ranked in accordance with the attached **eligibility requirements** and **funding criteria (Attachment A)**. The members of the Long Island Sound Fund Advisory Committee have an active interest in Long Island Sound issues and have expertise related to the categories of eligible projects. The Advisory Committee will make the final recommendations to the Commissioner of DEP regarding project selection. Subsequently, applicants will receive written notification of the decision. In some cases, the Advisory Committee may recommend modifications of a project proposal or will recommend funding a dollar amount which differs from the proposal. Following approval of the project application including any requested modifications, a contract will be drafted and mailed out for signature by the grant recipient and returned for subsequent state contract approval. Project work to be funded by the grant cannot begin until the execution date of the contract, and project funding cannot be released until a fully executed contract is in effect.

FUNDING GUIDELINES

Attached are **eligibility requirements** and **funding criteria (Attachment A)**, **application instructions (Attachment B)**, **a proposal cover page (Attachment C)** and **a budget summary page (Attachment D)** and **a research priority list (Attachment E)**. Submission of complete and accurate information will enhance the possibility of the proposal being selected for funding. Some general suggestions regarding the types of projects which are encouraged and which will be viewed more favorably by the Advisory Committee are also included in Attachment A.

In general, proposals must be completed within approximately one year from the contract execution date. Any seasonal constraints which may prolong the project duration must be specifically discussed in the proposal. Proposals which demonstrate a commitment to maintain and continue the project beyond the initial year in which it is implemented without Long Island Sound Fund support are encouraged and will receive additional consideration.

The suggested upper limit for projects is \$25,000. For projects which are more expensive or in order to guarantee the continuation of the proposed project beyond the initial year of its implementation, matching funds should be considered. Requests for larger grants will be considered, but only for exceptional and well-justified proposals. More than one proposal may be submitted for consideration by an individual applicant. For those applicants who have previously received funding through the Department of Environmental Protection, and specifically through the Long Island Sound License Plate Program, **past performance will be a factor considered in the approval process.**

ALTERNATE FUNDING OPPORTUNITIES

Applicants should be aware of additional funding opportunities for various Long Island Sound related topics through the Long Island Sound Study and its partners. For more information about these programs and to access contact information for each of the grant administrators, visit the Long Island Sound "Grants-at-a-Glance" page on the Long Island Sound Study website at <http://www.longislandsoundstudy.net/grants/index.htm>.

ATTACHMENT A

I. ELIGIBILITY REQUIREMENTS

Topics: To be eligible for Long Island Sound license plate funding, a proposal must address one or more of the following four general categories: public outreach and education, public access, habitat restoration or research. The categories are further defined as follows:

Public outreach and education programs developed to increase the public's awareness of the need to preserve and protect Long Island Sound, its natural habitats, and its resources;

Public access to Long Island Sound through the acquisition of property, easements or other permanent rights to coastal, tidal or navigable waters or the enhancement of access at existing access points through improvements such as the development of boardwalks, nature trails, fishing piers, picnic areas and parks;

Restoration and protection of habitat essential to the Long Island Sound ecosystem including riverine corridors used by migratory fish, mudflats, beaches and dunes, and coves and embayments, as well as important plant and animal species and their habitats through projects and management studies that lead to improvements in habitat restoration and protection; and

Research on Long Island Sound which responds to a clear need for additional information and provides and enhances the understanding, management and approaches to restoration of Long Island Sound's natural resources. **Please note that the DEP's 2008 research priority list for Long Island Sound is attached and identified as Attachment E. Proposals which address these priorities are particularly encouraged.**

PROPOSALS MUST INCLUDE:

- ◆ Submission of a complete application package (see Attachments B, C, and D), including free-form responses to questions 13-21;
- ◆ Demonstration of the relationship of the project to Long Island Sound;
- ◆ Demonstration that there is no other identifiable funding source for the project;
- ◆ Demonstration that the funding requested will provide start-up funding for a new program or project which will have long-term benefits for Long Island Sound rather than funding continuing efforts;
- ◆ Demonstration that the project may be easily transferred or shared among other schools and communities if appropriate;

- ◆ Demonstration of the public benefit expected to result from the project, such as educating the public as to the value of Long Island Sound as a natural resource, preserving and restoring Long Island Sound and its resources; e.g., improvement of fish and wildlife habitat, or improving public access to the project site;
- ◆ Demonstration that the project will be visible, clearly identified with the Long Island Sound License Plate Program, and include a mechanism for acknowledging funding from the Long Island Sound License Plate Program;
- ◆ As applicable, a demonstration of support for implementation of the proposal by high ranking public officials or administrators such as municipal chief elected officials, school administrators and appropriate boards or commissions in whose town(s) the project is located; the parties responsible for project operation and maintenance; adjacent property owners; and the public. In addition, if the applicant is not the owner of the property upon which the proposed project is located, a written demonstration of support and permission from the property owner is also needed; and
- ◆ As applicable, a demonstration that projects will be on lands accessible by the general public.

II. FUNDING CRITERIA

Proposals will be ranked and ultimately selected based upon the following considerations:

1. satisfaction of the eligibility requirements listed above;
2. **the applicant's ability to implement the project**, including but not limited to the:
 - time frames (**Note: This includes the extent to which proposals would be completed within one year from the contract execution date. Applications which demonstrate a commitment to continue the proposed project beyond the initial year of its implementation without Long Island Sound Fund support will be viewed more favorably.**);
 - need for authorizations; e.g., permits or certificates of permission
(**Note: Activities for which permits have already been obtained will be prioritized.** If permits are needed prior to the implementation of the project, funding will be awarded contingent upon, and a contract will be written following, receipt of such authorizations. Such permit applications must be submitted within six months of the receipt of the written notice of the award decision.);
 - support of municipality where the project is located;

- ownership of property;
 - applicants' experience and expertise;
 - **past performance** of applicant if previously funded by the Long Island Sound Fund or any other state funding (will also consider frequency of past funding and visibility given to the Long Island Sound Fund);
 - where projects involve groups of people, the applicant's ability to provide supervision and the qualifications of such supervisors;
 - the applicant's ability to perform and provide for follow-up and/or maintenance;
3. the costs versus benefits of the proposal including detailed cost information, public benefits and support information. The suggested upper limit for projects is \$25,000. Requests for larger grants will be considered only for exceptional and well-justified proposals; and
 4. as applicable, the extent to which the proposal would be matched by other sources of revenue or municipal services, including the extent to which such funds exist or need to be appropriated and the status of the appropriations process.

** Please note that indirect costs associated with projects are not eligible expenses.*

IV. PROJECT SUGGESTIONS

The following are general suggestions for the types of projects which are encouraged within the four funding categories:

1. **Education and Outreach:** Projects that provide new, innovative, hands-on educational approaches through schools, universities, municipalities, or community groups designed to promote long-term appreciation and understanding of Long Island Sound and its resources by the general public or high school and middle school age students. Examples might include organized beach clean-up activities or other coastal outdoor education activities which foster stewardship of Long Island Sound, creation and installation of educational signs, educational brochures, a computer program, professional video, textbook, or hands-on activities which could be duplicated by other groups or schools. **Because many Long Island Sound educational curricula projects have already been funded, new curricula will not be considered for funding this year. Educators should contact the Long Island Sound Fund Coordinator for a list of available curricular resources.** New projects which can be easily shared among other schools or communities, or reach a broad spectrum of citizens and have clearly defined methods to achieve such objectives are particularly

encouraged. For instance, a project may be shared among other schools through the implementation of teacher workshops and the development of a guide highlighting the pilot program. The LIS Fund strongly encourages applicants to utilize or disseminate existing environmental education materials (curricula, training materials, activity books, etc.) rather than designing new materials, because experts indicate that a significant amount of quality educational materials have already been developed and are under-utilized. The LIS Fund will consider funding new materials only where the applicant demonstrates that there is a need, e.g., that existing educational materials cannot be adapted well to a particular local environmental concern or audience, or existing materials are not otherwise accessible.

2. **Public Access:** Projects that provide new access opportunities or expand and enhance existing access to Long Island Sound and its tributaries including its coves, embayments, harbors, tidal rivers and their associated habitats. The projects must be accessible by a large segment of the general public and provide a permanent means of access which will be maintained over the long-term. Projects which include the construction of structures must be designed to comply with all applicable local and state building codes as well as the applicable requirements of the Americans with Disabilities Act. In particular, the DEP is interested in facilitating connections from urban communities to Long Island Sound. An educational component through signage or interpretive programs would be a valuable addition to the project. Examples might include property acquisition or site enhancements such as benches, wildlife viewing platforms, or interpretive trails; or for a municipality, documentation of or development of historic, but currently unknown right-of-ways.

2. **Habitat Restoration:** Habitat protection or restoration projects such as restoration of riverine corridors for migratory fish, rookery protection, or dune restoration through beach grass planting that have a high probability of success. As applicable, the project may include a community educational component. For instance, a dune restoration project may encourage volunteers to participate in the beach grass planting and educate the volunteers as to the value of beach grass planting as a means of achieving dune restoration. *If you are interested in conducting dune grass planting, please visit the EPA Long Island Sound Study website at: http://www.longislandsoundstudy.net/pubs/reports/habitat_rest_03/hri03_barriers.pdf or call DEP technical staff at (860) 424-3034 to obtain additional information. If you are interested in conducting a fishway project, please contact Steve Gephart of the DEP Fisheries Division at (860) 434-6043.*

4. **Research:** Small scale scientific and public policy research projects which respond to a clear need for additional information and provide and enhance the understanding, management and approaches to restoration of Long Island Sound's natural resources. For specific examples and an identification of priority research needs, see Appendix E.

ATTACHMENT B
LONG ISLAND SOUND FUND APPLICATION INSTRUCTIONS

These application instructions have been designed to apply to all activities eligible for funding by the Long Island Sound Fund. Please read these instructions in their entirety and answer each question consecutively by number. These instructions have been designed to minimize the potential for incomplete applications. Questions 1-12 must be answered by filling out the attached proposal cover page (Attachment C) **using the space provided**. Questions 13-21 should be answered by attaching additional pages to the cover page.

The level of detail required to fully answer each question is related to the scale and scope of the proposed project. Applicants are requested to provide a thorough description of the proposed project and answer each question as it applies to the activity. Submission of complete and accurate information will enhance the chance of the proposal being selected for funding.

An original and five copies of the application and other documentation must be mailed to the following address:

Attention: Kate Hughes Brown, LIS Fund Coordinator
Department of Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106-5127

DEADLINES: All applications and supporting documentation must be received at the DEP Office of Long Island Sound Programs at 79 Elm Street, Hartford, CT by 4:30 P.M. on Monday, March 17, 2008. Applications or supporting documents received after that date and time will not be considered. Applications or supporting documentation transmitted via e-mail or fax will not be accepted.

Note: All of the questions must be answered. If a question is not applicable to your particular proposal, please indicate "N/A". Do not leave the questions blank.

1. NAME, ADDRESS AND PHONE NUMBER OF APPLICANT:

Fill in the legal name(s), mailing address(es), phone number(s), and e-mail address of the applicant. For an incorporated business or academic institution, the legal name should be that which is registered with the Secretary of State's Office. Phone number(s) must be a number where the applicant can be reached during business hours. Please be aware that Federal Agencies *are not eligible* for funding under this program, but may collaborate with an eligible entity such as a non-profit organization, school, university, municipality, state agency or individual.

2. NAME, ADDRESS AND PHONE NUMBER OF CONTACT (if different from applicant):

Fill in the name(s), mailing address(es), phone number(s), and e-mail address of the contact only if different from the applicant. Phone number(s) must be a number where the contact is reachable during business hours.

3. NAME AND TITLE OF AUTHORIZED REPRESENTATIVE:

State the name and title of the representative who, if the contract is awarded, would be legally authorized to sign the contract. Have this individual sign and date the application form in the space provided. **Applications which are not signed by a legally authorized individual shall not be accepted, and will be returned.** For applicants other than an individual, the applicant will need to supply a signature resolution indicating that the signer is legally authorized to do so.

4. FEDERAL EMPLOYMENT IDENTIFICATION NUMBER/SOCIAL SECURITY NUMBER:

Provide the federal employment identification number of the applicant or social security number if the applicant is an individual, and state the name of the entity to which this number corresponds.

5. IDENTIFY THE CATEGORY OF ACTIVITY OR ACTIVITIES OF THE PROPOSAL (check as many as appropriate):

- ☐ public outreach and education
- ☐ public access
- ☐ habitat restoration
- ☐ research

6. TITLE:

State the title of the proposed project.

7. BRIEF DESCRIPTION:

Provide a brief description of the proposed project.

8. PRODUCTS:

State the products of the proposed project. For example, a public access project may result in a boardwalk, while an education project may produce a brochure. Please note that it is not necessary that a tangible object be produced. However, it contributes to the visibility of the project.

9. DESCRIBE MECHANISMS FOR ACKNOWLEDGING THE LONG ISLAND SOUND LICENSE PLATE PROGRAM IF THE PROJECT IS SELECTED FOR FUNDING:

Provide a description of how acknowledgment shall be given to the Long Island Sound License Plate Program if the project is selected for funding. The ability to continue funding projects through the Long Island Sound Fund depends upon the continued sale of Long Island Sound license plates. It is therefore essential that those projects which are funded through the program visibly acknowledge it. For a public access project, for instance, acknowledgment may be provided by the placement of a sign near the access expressing the source of the funding for the project. (Please note that an electronic copy of the logo image for the Long Island Sound license plate program will be provided to assist in its reproduction.)

10. TOTAL FUNDING REQUESTED:

State the total amount of funding requested from the Long Island Sound Fund. For determination of such an amount, refer to question 19 for an explanation of how to provide the budget for the proposed project.

11. TOTAL MATCHING FUNDS:

State the total amount of matching funds committed for the proposed project. Please refer to question 20 for a further explanation regarding matching funds.

12. TIME FRAME:

State the proposed duration of the project. Refer to question 18 for an explanation of how to determine a proposed schedule for implementation of the project.

13. NAME, ADDRESS AND PHONE NUMBER OF PROPERTY OWNER (if different from applicant):

Fill in the name(s), mailing address(es), phone number(s), and e-mail address of the property owner(s) if different from the applicant, or state "same as applicant". Phone number(s) must be a number where the contact is reachable during business hours.

14. ADDRESS OR LOCATION OF PROPOSED PROJECT (include street address and municipality), AS APPLICABLE:

Include the street address and the municipality where the proposed project is located, as applicable. If the site does not have a street address, please provide a description of and directions to the site. Also include a copy of the map and lot number(s) of the site as identified by the Tax Assessor's Office for the municipality in which the site is located.

15. NAME OF WATERBODY AT SITE OF PROPOSED PROJECT, AS APPLICABLE:

Provide the name of the river, harbor, bay or cove at which the proposed project is located, as applicable.

16. DESCRIBE THE PURPOSE AND NEED FOR PROPOSED PROJECT:

Describe the purpose, need and intended use of the proposed project including a description of the public benefit expected to result from the project and a demonstration of the relationship of the project to Long Island Sound.

17. DESCRIBE THE SCOPE OF WORK:

Describe the scope of work identifying each task, product and service.

- ◆ If the project is within the category of **EDUCATION AND PUBLIC OUTREACH**, please at a minimum include the following information:
 - ◆ description of the product(s), tasks and services. Indicate if there will be a charge to the public for use or distribution of any products created as a result of the proposed project. If so, explain;
 - ◆ whether general information on Long Island Sound or a specific type of resource or activity will be the focus;
 - ◆ whether the means to convey the information on Long Island Sound will be through hands-on or field experience or mainly through publications;
 - ◆ an explanation of the educational and scientific value of the project;
 - ◆ identification of the target group, including the number and range of ages of the group and a description of how they will be impacted by the project;
 - ◆ whether urban youth and community groups will be involved;
 - ◆ how schools or the general public will be made aware of the availability of the project and its products; e.g., advertisement;
 - ◆ how the product(s) or information on the project will be distributed or be made available to schools or the general public;
 - ◆ how the project may serve as a pilot project and be easily transferred or shared among other schools or communities;
 - ◆ how the project will be able to continue beyond its initial implementation;
 - ◆ identification of advisors of the project; and
 - ◆ other.

- ◆ If the project is within the categories of **PUBLIC ACCESS** or **HABITAT RESTORATION**, as applicable, please at a minimum include the following information:
 - ◆ whether federal, state and/or municipal authorizations (i.e. permits) are needed (and the status of any requests for permits). **If permits are needed prior to the implementation of the project, funding will be awarded contingent upon, and a contract will be written following, receipt of such authorization. Such permit applications must be submitted within six months of the receipt of the written notice of the award decision.);**
 - ◆ a map with photographs and site plans identifying and discussing the project area, along with the approximate location of any affected coastal resources, proposed facilities and location of mean low water, mean high water and the high tide line. Construction projects should have a scaled plan view and elevation;
 - ◆ a narrative describing the project area including coastal resources and proposed facilities and their spatial relationship;
 - ◆ description of the product(s), tasks and services. Indicate if there will be a charge to the public for use or distribution of any products created as a result of the proposed project. If so, explain;
 - ◆ a demonstration of ownership or other legal interest in the affected property, a copy of any applicable property deeds and conservation easements or a written demonstration of permission and support of the property owner;
 - ◆ whether the property where the project is proposed is accessible by the general public and any proposed structures are designed to comply with local and state building codes and with all applicable requirements of the Americans with Disabilities Act;
 - ◆ the extent to which the project would enhance the public's enjoyment and use of Long Island Sound, as applicable;
 - ◆ the extent to which the project would enhance the preservation and restoration of Long Island Sound and its resources; e.g., riverine corridors, mudflats, beaches and dunes, coves and embayments, plant and animal species, as applicable. For habitat restoration projects, an estimate of the extent of restoration is required, e.g., acreage, square footage, or river miles;
 - ◆ the probability of the successful reestablishment of native plant and wildlife communities, as applicable;
 - ◆ discussion of provisions for long-term maintenance of the project; and
 - ◆ other.

- ◆ If the project is within the category of **RESEARCH**, please provide the following information. Please be aware that priority consideration shall be given to that research which addresses topical management issues as opposed to pure research:

Objectives describe the scientific objectives and the significance of the proposed work, and provide an explanation of the extent to which the project responds to a clear need for additional information and provides and enhances the scientific understanding and management of Long Island Sound's natural resources and estuarine processes;

Hypothesis provide a clear statement of the hypotheses and predictions to be tested by the proposed research. Please refer to Attachment E for a list of DEP's research priorities for 2008;

Methods provide an explanation of the method to be used to test the hypotheses and accomplish the specific research objectives including a discussion of what, when, where, and how the data are to be collected, analyzed and reported:

- ◆ field methods and laboratory methods should be scientifically valid and reliable and accompanied by a statistically sound sampling scheme;
- ◆ methods should be well documented and described in sufficient detail to enable other scientists to evaluate their appropriateness and their possible impact on the environment, including plans or schematic diagrams as applicable;
- ◆ methods chosen should be justified and compared with other methods employed for similar work; and
- ◆ analytical methods and statistical tests applied to the data should be documented, thus providing a rationale for choosing one set of methods over alternatives.
- ◆ an explanation of quality control measures (e.g., statistical confidence levels, standards of reference, performance requirements and internal evaluation criteria);
- ◆ an explanation of how the data are to be synthesized, interpreted and integrated into final work products;
- ◆ a map identifying the project area and a discussion of features of interest, as applicable;

References The discussion of methods and rationale should demonstrate a knowledge of the relevant literature and use this literature to support the need for the research and must include complete references to the cited literature.

Products

- ◆ a description of the product, (e.g., reports, maps, computer programs, data in digital format); and
- ◆ include an explanation of how and to whom the findings of the research will be distributed or be made available.

****Please note that research proposals that include a goal of publishing findings and data in applicable peer reviewed journals will be given priority consideration.**

*****Please note that any project which includes water quality monitoring shall follow standard DEP sampling, reporting and documentation protocols.**

Qualifications an explanation of the experience and past LIS Fund grant performance of the principal investigator and key personnel, their familiarity with the geographic area of the proposed study, and their publication record (**Please include resume or curriculum vitae for each principal investigator**); and

Ownership a demonstration of ownership or other legal interest in the affected property or a demonstration of permission and support of the property owner, as applicable.

18. DEFINE THE SCHEDULE FOR COMPLETION OF THE SCOPE OF WORK FOR THE PROPOSED PROJECT:

Provide a proposed schedule for completion of each phase of the project as it corresponds to the scope of work described in response to question 17 and the total number of months needed to complete the project. Identify any seasonal constraints or specific requirements for work scheduling. For example, work times may need to be coordinated with a school year calendar, observation of environmentally sensitive seasons, or the receipt of required authorizations.

Please note, projects should generally be completed within one year from the contract execution date. It is anticipated that the contracts will be mailed to award recipients for review and signature by March, 2007 (with the exception of projects awaiting necessary regulatory authorizations or additional information). Within approximately six weeks from the date all necessary signatures have been obtained and the contract has been properly executed, the funding will be made available for use by the recipient. Such a timeline should be taken into account in determining a proposed schedule for the project.

19. DEFINE THE BUDGET FOR IMPLEMENTATION OF THE PROPOSED PROJECT:

Using the attached budget summary page (Attachment D), provide a list of the expenses for the proposed project. In addition, **on a separate sheet**, provide a brief narrative explaining each line item expense requested from the Long Island Sound Fund. **Indirect costs associated with projects may be used as matching funds. However, LIS Funds cannot be used for indirect costs.**

The suggested upper limit for projects is \$25,000. For projects which are more expensive or in order to guarantee the continuation of the proposed project beyond the initial year of its implementation

without LIS Fund support, matching funds or alternative funding should be considered. Requests for larger grants will be considered, but only for exceptional and well-justified proposals.

Any work subcontracted must be arranged through a competitive selection process unless there is a demonstration of the need for a sole source.

Further, unless otherwise requested and approved in advance, **a 50% payment of the grant amount will be initiated following execution of the contract and the remainder will be initiated following completion of the project** to the Commissioner's satisfaction, submission of documentation that all the elements of the project have been completed and submission of expenditure invoices indicating expenses incurred. **If your organization has a separate grants, contracts or financial office, it would be prudent to have them review your proposal prior to submission, to determine if an alternate payment schedule is required.**

20. DESCRIBE THE AVAILABILITY OF ALTERNATIVE FUNDING OR MATCHING FUNDS OR IN-KIND SERVICES:

Provide a description of the availability of alternative funding, matching funds or in-kind services. Matching funds may consist of actual funds as well as other contributions such as in-kind services, materials and volunteer labor. If matching funds are available, a demonstration of the commitment for receipt of those funds should also be submitted. Please be aware that the Long Island Sound License Plate Program supports programs for which there are no other identifiable sources of funding, as well as larger projects where several funding partners have provided a funding commitment.

Since applicants who demonstrate a commitment to continue the proposed project beyond the initial year of its implementation without Long Island Sound License Plate Program funding will be viewed favorably, a demonstration of a commitment of future funding for that purpose is encouraged.

21. DEMONSTRATE THE SUPPORT OF THE APPROPRIATE PERSONS OR ORGANIZATIONS, AS APPLICABLE:

Demonstrate the support for implementation of the project by municipal chief elected official(s) and appropriate boards or commissions in whose town(s) the project is located, the parties responsible for project operation and maintenance, adjacent property owners and the public, as applicable. If volunteer groups, schools or other organizations are involved in the proposed project, submission of letters of commitment or letters expressing interest in the program are strongly encouraged.

ATTACHMENT C
LONG ISLAND SOUND FUND - PROPOSAL COVER PAGE

(Please type answers using the space provided)

1. Name, Address, Phone Number and E-mail Address of Applicant:	
2. Name, Address, Phone Number, and E-mail Address of Contact (if different from applicant):	
3. Name, Title and Signature of Authorized Representative (legally authorized to sign the contract):	
Name and Title:	
Signature:	Date:
4. Federal Employment Identification Number (Social Security Number if applicant is an individual):	
5. Identify Category of Activity or Activities of Proposal (Check as Appropriate):	
<input type="checkbox"/> Public Outreach & Education <input type="checkbox"/> Public Access <input type="checkbox"/> Habitat Restoration <input type="checkbox"/> Research	
6. Title of the Proposed Project:	
7. Brief Description:	
8. Products:	
9. LIS Fund Acknowledgment:	
10. Total Funding Requested from the LIS Fund:	
11. Total Matching Funds Provided:	
12. Duration of Project Requested: ___ months From: _____ To: _____	
List Time Constraints, if any:	

Items 13-21 must be appropriately labeled and included as an attachment to this form.

ATTACHMENT D

BUDGET SUMMARY

Name of Applicant: _____

*EXPENSES:	Long Island Sound Funds	Matching Funds
Personnel		
Salaries:	\$ _____	\$ _____
Fringe Benefits:	\$ _____	\$ _____
Materials/Supplies:	\$ _____	\$ _____
Travel:	\$ _____	\$ _____
Contractual/Consulting Fees (specify):	\$ _____	\$ _____
Printing and Copying:	\$ _____	\$ _____
Office Expenses:	\$ _____	\$ _____
Other (please specify**):	\$ _____	\$ _____
Total Long Island Sound Funds Requested:	<div>\$ _____</div>	
Total Matching Funds Provided:		\$ _____
Total Project Costs:		\$ _____

* On a separate sheet, provide a brief narrative explaining each line item expense requested from the Long Island Sound Fund.

** Indirect costs associated with projects may be used as matching funds. However, LIS Funds cannot be used for indirect costs.

ATTACHMENT E

RIVER HERRING STUDIES

Background: The alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*) are anadromous “river herring” that enter freshwater habitats from Long Island Sound to spawn each spring. The protection and enhancement of these runs are a high priority of the Inland Fisheries Division and each year fishways are built around dams to allow river herring to regain access to historical spawning habitat. However, the sizes of runs of both species have decreased dramatically in recent years for reasons that are unclear. Additional research on life history, population dynamics, predator-prey relationships, and behavior are needed to help understand the current status of these runs, factors in the recent declines, and what management actions might result in run enhancement. Recently, there has been concern expressed by some lake authorities that the Division’s objective of restoring sea-run river herring populations to some lakes might disrupt the ecosystem and result in deleterious changes (e.g. algal blooms, loss of fish species, etc.). It appears that the impact of sea-run river herring may be different from those of landlocked alewives but we lack documentation that might reassure lake residents.

Research: In the 1960s, a graduate student at the University of Connecticut did a study of the Brides Brook alewife run. A similar study was repeated by a UConn graduate student in 2003 and 2004. His study also looked at river herring runs in Roaring Brook, Lyme. During two field seasons, he documented numbers of upstream migrants, timing of upstream migrants, environmental conditions such as water flow and temperature, age, sex, and level of maturity of migrant. He was not able to study the young-of-year in Brides Lake nor the emigration of these fish to the sea. The Inland Fisheries Division would be interested in studies that would follow up on the results of these UConn studies in Brides Brook and Roaring Brook, similar studies in other bodies of water in Connecticut, and studies of numbers, movement, and depredation of blueback herring in the Connecticut River. In addition, the Division is interested in studies that would document the impact of sea-run alewives or blueback herring in lakes and/or large impoundments of the state, with particular focus on impacts to water quality parameters and the resident fish community. Interactions and comparisons between sea-run and landlocked alewives are of special interest. Active technical assistance will be offered to any research program by the Inland Fisheries Division’s Diadromous Fish Program. Results will assist in the protection, regulation, and restoration of river herring runs statewide and support the forage base of many marine species in Long Island Sound.

For additional technical information please contact Stephen Gephard, Diadromous Fish Program, 860-447-4316.

AMERICAN EEL STUDIES

Background: The American eel (*Anguilla rostrata*) is a catadromous fish species well-distributed throughout Connecticut and the East Coast. However, numbers have declined in recent years and the U.S. Fish & Wildlife Service (USFWS) was petitioned to list it as ‘endangered’ under the federal Endangered Species Act. The USFWS decided against listing it at this time but acknowledged in its biological finding that the species is experiencing unexplained declines and more information is needed. Larval eels colonize the Connecticut shoreline during February – May annually and then slowly move upstream into diverse habitats. Eels may live in freshwater habitats for as much as 20 years before moving downstream in the fall to re-enter the ocean and migrate to spawning habitat in the Sargasso Sea. These migratory adult eels are known as silver eels. Not much is known about them and both the USFWS and the Atlantic States Marine Fisheries Commission has recommended research that will add to our knowledge of silver eel biology and behavior.

Research: A graduate student at the University of New Haven recently conducted the only known study of silver eels in Connecticut. It focused on silver eels moving through a water company’s reservoirs and was very site specific. Research is needed on a smaller system where numbers emigrating silver eels can be monitored year after year and data can be collected on the up or down trend in numbers of migrants, timing of the migration, environmental cues, and the amount of habitat required to support the production of one silver eel. Such a study would be best if undertaken by a college or university or other institution with a long-term commitment to the sampling site and monitoring. Funds could be used for set up costs. It is likely that the annual monitoring would cost very little money. If the monitoring is designed appropriately, it may be possible to document the number of incoming elvers and the number of resident yellow eels and compare these to the number of emigrating silver eels to help determine how many younger eels it takes to produce one silver eel. This kind of a ‘recruitment model’ has never been done for American eel. Silver eels migrate at night in the fall during rains (and often leaf drop), so it is difficult to operate a trap that will stand up these challenging environmental conditions. It will be essential that a small stream be chosen as a study stream in order for the mechanics of the sampling to be manageable, a site where the applicant has long-term access, and the ability to seasonally install a trap that will sample

the entire streamflow. Results will assist in the protection, regulation, and restoration of American eel and support the forage base of many marine species in Long Island Sound.

For additional technical information please contact Stephen Gephard, Diadromous Fish Program, 860-447-4316.

RAINBOW SMELT STUDIES

Background: The rainbow smelt (*Osmerus mordax*) is an anadromous fish species formerly well-distributed throughout Connecticut and from Canada down to New Jersey. However, numbers have declined in recent years and the National Marine Fisheries Service (NMFS) has listed it as a 'candidate species' for listing under the federal Endangered Species Act. Smelt spawn in March and April in Connecticut, ascending coastal rivers only as far as the first riffle. Eggs are deposited in thick mats on gravel beds during nighttime runs into shallow water near the head-of-tide. Smelt is an important forage species to many predators and is a highly-valued food fish sought after by recreational anglers. Popular sport fisheries existed in many Connecticut estuaries up until the 1970s when runs began to decline. Smelt are known to be sensitive to lowered water quality, certain types of contaminants, and degraded habitat. Small numbers of smelt are still captured in Long Island Sound surveys but there has been no documentation of active spawning runs in Connecticut for many years. Runs have also disappeared from New Jersey and New York and Massachusetts reports its smelt runs are declining. The species is now considered 'threatened' by the State of Connecticut and there is a proposal to downgrade that status to 'endangered'.

Research: A graduate student from the University of Connecticut attempted to document existing smelt runs in eastern Connecticut in the early 2000s but could not find one. This thesis included many other topics and could have missed small, clandestine runs. It is believed that if smelt runs still exist in Connecticut, they must occur in lightly perturbed small streams in eastern New London County. An intensive survey of these streams from late January to early May could be undertaken by a person using known monitoring techniques without the complication of other study components needed to justify a graduate thesis. It is probably best undertaken by an individual(s) who does not have the burden of classwork and is free to visit these streams almost every day and night during the study period. Since equipment needs are minor, most of the requested funds would be spent on travel costs and wages. The Inland Fisheries Division would assist in training and habitat identification. Results will assist in the protection, regulation, and restoration of rainbow smelt and support the forage base of many marine species in Long Island Sound. Specifically, the results may help the DEP determine if the current status of the species ('threatened') is appropriate or if a status change is justified.

For additional technical information please contact Stephen Gephard, Diadromous Fish Program, 860-447-4316.

DISTRIBUTION, ECOLOGICAL CHARACTERIZATION, AND PROTECTION STRATEGIES FOR SEA-LEVEL FENS IN CONNECTICUT

Background: Sea-level fens occur at the interface of a groundwater discharge slope and an estuarine marsh where the amount of freshwater discharge creates an acidic, oligotrophic hydrologic condition influenced by salt water only during unusually high tides. The vegetation is usually herb-dominated, with a mixture of estuarine and palustrine plants, e.g. *Aster novi-belgi*, *Carex hormathodes*, *Carex howei*, *Cladium mariscoides*, *Drosera intermedia*, *Eleocharis rostellata*, *Juncus canadensis*, *Juncus pelocarpus*, *Rhynchospora alba*, *Scirpus pungens*, and *Triadenum virginicum*. Mosses such as *Sphagnum lescurii*, *S. palustris*, and *S. cyclophyllum* often occur. Sea-level fens, considered of global significance by The Nature Conservancy, usually occur as small, linear bands adjacent to salt marshes that parallel upland slopes. The only sea-level fen presently known to occur in Connecticut is located adjacent to the Barn Island Wildlife Management Area marshes in Stonington.

Research: The purpose of this research is to examine the ecological requirements necessary for the formation of sea-level fens, and determine their distribution in Connecticut. For each documented site, an ecological characterization and conservation strategy will be developed. Landowner permission will be the responsibility of the researcher.

For additional technical information please contact Ken Metzler, EGIC, at 860-424-3585.

HYDROLOGY OF RESTORED TIDAL WETLANDS

Background: DEP has restored numerous tidal wetlands along Connecticut's coast. Many of these marshes require a period of 10 to 20 years for the restoration process to return salt marsh restoration to degraded marshes dominated by *Phragmites*. There is considerable variation in the response of degraded marshes to restoration. The marshes at Barn Island support extensive emergent vegetation whereas Long Cove supports extensive panne areas at the head of the cove. The time required for *Phragmites* to revert to native vegetation appears to be occurring over a much longer time frame in some marshes such as impoundment IV at Barn Island. Post restoration tides studies and tidal modeling may shed some insight to these timeframes and processes and also assist managers in the identification of appropriate tidal flood restoration regimes to either accelerate restoration rates or minimize the formation of extensive pool complexes.

Research: Compile tidal data from a series of existing salt marsh restoration sites and model tidal flows using 2-D models to evaluate tidal hydrology across the marsh surface as it relates to major vegetation types. Baseline elevation data for the marsh surface and water regulatory structures (e.g., culverts, gates) will be established.

For additional technical information please contact Ron Rozsa, OLISP, at 860-424-3616.

CONNECTICUT RIVER OCEAN OBSERVING SYSTEM

Background: Climate change scientists are predicting significant changes in the type of winter precipitation over the next 25 years for New England. Reductions in snowfall amounts could alter the timing, duration and length of the spring freshet on the Connecticut River. In May, surface waters at the mouth of the river are generally fresh at low tide and high tide. By late summer, salt water can be detected in surface waters generally as far north as North Cove, Essex. This is the dividing line between the upstream freshwater tidal marshes and the downstream brackish tidal marshes, many of which have been designated as Wetlands of International Importance. There is the potential for the brackish/fresh tidal transition zone to migrate upstream and even introduce salt marshes at the mouth of the river. There are numerous rare plants in the current wetlands that may be impacted. Scientists are also predicting rapid changes in the position of sea level in this same time frame, which could also affect the position of the salt wedge on the river.

Research: Design a network of recording salinity monitors that can be used to evaluate potential alterations to the Connecticut River estuary resulting from climate change. The location of recorders should take into account the distribution of tidal wetland ecosystem types on the river and consider the location of existing tidal gates. This proposal emphasizes surface water salinity, bottom deployment should be considered as a means to measure changes in river bottom habitats. The ideal system is one that is automated to all for real time readings and the data accessible via the internet. All proposals must describe the relationship to the developing LIS Ocean Observing System.

For additional information please contact Ron Rozsa, Office of Long Island Sound Programs, 860-424-3616.

EVALUATION OF FLOATS, AND FLOATING & FIXED DOCKS ON BENTHIC SURFACES

Background: Many floats and floating docks are constructed to come into contact with intertidal sediment at low tide. Many mechanisms are used to minimize the area of contact, including float stops, skids, and cradles. Potential impacts resulting from direct bottom contact and wave and tidal action around the structure can lead to changes in the benthic community structure, negative impacts upon wildlife, changes in productivity, and changes in the chemical and physical characteristics of the habitat.

Research: Evaluate the effects of floats and floating docks upon the seafloor for different substrate types and tidal amplitudes. This research should focus on: (1) an analysis of the benthic community (infauna as well as epifauna), including evaluation of species diversity, abundance, and biomass; (2) negative impacts to wildlife (such as native benthic species, fishes, and waterfowl); (3) impacts to productivity (primary production analysis beneath and adjacent to the structure); (4) impacts to water quality (nitrogen, carbon, and turbidity); and (5) sediment impacts (turbidity, compaction, and erosion) for each substrate type. The scope of this research may be expanded to include impacts of fixed docks and piles, as well as impacts from floats that never come into contact with the bottom. A single proposal to study the impacts of all three types of structures would be ideal. Given the budget limitations of the funding program, however, the difference in costs may have to be made up with matching funds.

For additional technical information please contact Kevin Zawoy, Office of Long Island Sound Programs at 860-424-3626, or Greg Chasko, Wildlife Division at 860-424-3011

EVALUATION OF CCA ACCUMULATION IN SEAFLOOR SEDIMENTS AND IMPACTS ON BENTHIC FAUNA IN LONG ISLAND SOUND

Background: Many structures in Long Island Sound are constructed with lumber treated with Chromated Copper Arsenate (CCA) and other wood preservatives. Prior research has shown that leachates from treated lumber can accumulate in sediments adjacent to the treated structures and may adversely impact benthic fauna at varying spatial scales dependant on water circulation patterns in the vicinity of the structures. The majority of leaching occurs within the first 90 days following the installation of a structure treated with preservatives. Research quantifying CCA accumulation in sediments, residence time of the accumulated leachates in the sediments, and the degree of impacts to benthic fauna across a range of flushing regimes and varying structure sizes is currently lacking.

Research: Evaluate (1) the extent of CCA accumulation in sediments adjacent to structures constructed with CCA and (2) impacts to benthic fauna from structures constructed with CCA treated lumber across a range of flushing rates and structure sizes. This research should quantify the accumulation of leachates in sediments and benthic fauna adjacent to and at specified distances from newly constructed and historically existing structures in well flushed and poorly flushed areas of Long Island Sound. For each flushing regime, small-scale (residential docks) and large-scale (marina/bulkheads) structures should be selected for comparison of impacts due to the differences in structure size. Leachate accumulation should be quantified at intervals following installation to create an accumulation time series and to evaluate the residence time of the leachates in both sediments and benthic fauna. Estimates of benthic fauna mortality as a function of known toxicity levels compared to observed leachate levels and observed benthic fauna mortality should be determined for the time series data.

For additional technical information please contact Tonia Selmeski, Office of Long Island Sound Programs at 860-424-3599.

BENTHIC CHANGES IN THE RESTORED ESTUARINE EMBAYMENT KNOWN AS MUMFORD COVE, GROTON, CT

Background: In 1987, the Wastewater Treatment discharge to Mumford Cove was removed. Nitrogen enrichment from this discharge was responsible for the formation of extensive beds of *Ulva lactuca*. Apparently, the *Ulva* disappeared soon after the removal of the discharge. By 2002, 50 acres of *Zostera marina* had reestablished spontaneously. John Buck, a researcher at UCONN, described the biological communities of Mumford Cove from 3 sampling locations in 1970 and 1971. Applied Science Associates (ASA), Inc., prepared a report in 1989 describing a monitoring study of the macrophytes and benthic invertebrates of this cove.

Research: To document the present day condition of the benthic communities in the restored estuarine embayment known as Mumford Cove and ideally contrast these data to the degraded condition that existed before the outfall relocation. At a minimum this research will include samples from the 3 Stations described by Buck. Ideally a suite of permanent monitoring stations would be developed that would cover salinity and sediment gradient of the cove and benthic habitat within and without *Zostera* beds. The research should also identify reference natural benthic habitat (with and without *Zostera*) to compare the restoration communities inside the Cove. The study should also document the character of any benthic macrophyte communities. The study will characterize changes in the benthic communities since the 1970-1971 study by Buck and ASA. Buck also described the phytoplankton of the Cove for this period of time. The proposal should consider the inclusion of comparable phytoplankton studies to establish modern baseline. GPS locations shall be provided for sampling locations. The proposal should also demonstrate the strengths and weaknesses, if any, of the proposed comparative analysis. The research should also make recommendations with regards to what types of benthic parameters should be studied in embayments to assess the restoration of benthic communities in response to nitrogen reduction. The proposal should also comment upon the utility of various benthic community metrics such as numbers of species, diversity, a community structure to name a few within the context of what represents a restored benthic ecosystem.

For further information, contact Ron Rozsa of the Office of Long Island Sound Programs at 860-424-3616.

DEFINING AND QUANTIFYING IMPACTS TO *ZOSTERA MARINA* FROM ACTIVITIES OTHER THAN NITROGEN ENRICHMENT

Background: *Zostera marina*, once present throughout Long Island Sound, has declined due to nitrogen enrichment from sewage treatment plants. Today *Zostera* is largely absent to the west of East Lyme. It is known from studies conducted in other estuaries, that *Zostera* is impacted by a variety of activities such as boat propellers, mooring anchors/chains, and various fishing activities including lobster pots and bottom trawling for fish and dredging for shellfish. This research would conduct field surveys of existing beds to establish the types of activities that are causing bed damage and to assess the magnitude of impacts for current human uses.

Research: Conduct surveys of strategic *Zostera* beds to document and quantify bed damage/loss from various human activities. Locations of beds to be studied should be identified through consultation with DEP staff and the 2002 *Zostera* maps. The research should describe their methodology for these surveys such as locating boundaries of damaged beds with GPS or combining underwater video with GPS technology.

For additional technical information please contact Ron Rozsa, Office of Long Island Sound Programs, 860-424-3616

BENTHOS DIVERSITY AS A WATER QUALITY INDICATOR

Background: In recent years, DEP's Long Island Sound ambient water quality monitoring program has collaborated with the EPA's National Coastal Assessment to sample a broader suite of chemical and biological parameters and indicators of water quality. Benthic organism diversity is one indicator supported by the NCA that may hold promise as an integrator of general water quality and habitat conditions. However, added research and application through pilot monitoring will help refine the tool and determine the value of estuarine benthos as a widespread indicator.

Research: Evaluate the use of estuarine benthic organisms as an indicator of habitat and water quality in Long Island Sound. A useful indicator methodology will have broad application among various coastal environs and provide a useful measure of relative conditions among the state's estuarine harbors, embayments and offshore areas. Review of previous benthos studies in Long Island Sound and the National Coastal Assessment and other national monitoring protocols should precede development of approaches specific to Long Island Sound.

For additional technical information please contact Paul Stacey, Water Management, 860-424-3020

NITROGEN SATURATION OF FORESTED LANDS / BUFFERS

Background: Forested lands and forested stream buffers are generally touted as ideal land cover to keep nitrogen and other pollutants out of streams and estuaries. However, acid deposition, including nitrogen deposition, may impair health of forests and saturate the system with nitrogen. It appears that forests in Connecticut may be yielding three times as much nitrogen as would occur under more natural conditions. Consequently, forested land cover is identified as a major contributor of atmospheric nitrogen to Long Island Sound, as nitrogen deposition may not be effectively retained in forests and stream buffers.

Research: Identify typical unit area export rates of nitrogen from forests in Connecticut and how much is enrichment compared to a natural export rate. Determine if forest health has been compromised by cation leaching from acid deposition or nitrogen saturation. Identify critical loads of nitrogen that would lead to abnormal nitrogen leaching to streams and estuaries. In the face of atmospheric loading and potential nitrogen contributions to forested buffers and forests from adjacent urban and agricultural lands, determine the value of forests and buffers as a nitrogen management tool.

For additional technical information please contact Paul Stacey, Water Management, 860-424-3020

DELIVERY AND IMPACTS OF NITROGEN ON SMALL EMBAYMENTS

Background: Attention has been focused on managing gross nitrogen loads to LIS to alleviate offshore hypoxia in the bottom waters of western LIS. Studies have not evaluated nitrogen enrichment loads from small, coastal watersheds and the impacts on small embayments. Effects are more likely to be changes in flora and associated fauna, particularly loss of

SAV and increases in less desirable or even harmful algae. The dynamics of nitrogen delivery may be quite different in a small coastal watershed because of soil type, presence of septic systems and other effects of development.

Research: Study the relationship between development and nitrogen enrichment in small, coastal embayments and determine specific activities and sources that increase flux of nitrogen to the embayment. Study the effects on near shore habitat, particularly impacts on SAV, macroalgae, and algal blooms. Identify management practices that would help alleviate any observed impacts on the embayment. If possible, relate trends in effects to changes in land practices and pollutant loading.

For additional technical information please contact Paul Stacey, Water Management, 860-424-3020

MICROSCOPIC PHYTOPLANKTON COMMUNITY STRUCTURE IN LONG ISLAND SOUND – RESPONSES TO REDUCTION IN NITROGEN LOADING

Background: CT DEP, NY DEC and NYC DEP through EPA's Long Island Sound Study, has been working to reduce nitrogen loading to the Sound in order to improve the summertime hypoxia conditions in the bottom of the Sound. It is critical to have the information about the changes in phytoplankton community structure in response to reducing nitrogen concentration in order to understand the potential effect of nitrogen reduction on the Long Island Sound ecosystem. The results of CT DEP's long term monitoring efforts showed that relative amount of diatoms in total phytoplankton has changed significantly in the last 11 years based on the biogenic silicate and chlorophyll measurements. However, detailed information about species composition is still lacking. CT DEP's current phytoplankton identification project will yield such information, but the project will last only for two years (ending November 2003). Thus additional research (years) is needed to continue the time series in order to identify any effect of nitrogen reduction. The hypotheses to be tested are: 1. Are the phytoplankton community structures changing in response to the reducing nitrogen concentrations in the Sound? 2. Does the reduction in nitrogen promote the species that survives in low nitrogen conditions, e.g., nitrogen fixing blue-green algae or flagellates instead of diatoms?

Research: Study the community structure of phytoplankton in the Sound. The results will be analyzed using statistical approach to identify any change in the phytoplankton community structure.

For additional technical information please contact Paul Stacey, Water Management, 860-424-3020

EFFICIENCY OF STANDARD STORMWATER BEST MANAGEMENT PRACTICES FOR NITROGEN REMOVAL

Background: Management plans for Long Island Sound have established a 10% nitrogen reduction target from all urban lands in Connecticut and New York. Stormwater monitoring data of generally untreated stormwater compiled by CTDEP shows a median total N concentration of about 2 mg/L. The literature suggests that the limit of technology for the most efficient nitrogen-removing BMPs, such as wet ponds and wetlands may be in the range of 1.5-2.0 mg/L. Are standard BMPs for stormwater worth the expense if this possible relationship is generally true?

Research: Evaluate the benefits of stormwater BMPs (wet ponds and wetlands) compared to quality of stormwater contributions with no or minimal BMP application. Can the suggested limit of technology be improved upon? Does the existing land cover already meet expectations for engineered BMPs to remove nitrogen?

For additional technical information please contact Paul Stacey, Water Management, 860-424-3020

REUSE AND DISPOSAL OF CATCH BASIN MATERIALS AND STREET SWEEPINGS

Background: The routine removal of catch basin materials and the regularly scheduled sweeping of street sand and debris are of paramount importance in preventing materials from entering nearby water bodies and other water resources as nonpoint source pollution. EPA Phase II stormwater permit components will require regulated municipal separated storm sewer systems to develop and implement operation and maintenance programs to prevent or reduce pollutant runoff from municipal operations into the storm sewer system. These programs will most likely include regular schedules for street sweeping and catch basin maintenance.

Although maintenance of catch basin sumps and street sweeping are already relatively routine activities, the proper disposal or reuse of the materials removed from streets and catch basin sumps is an important issue that must be better addressed. Road sand may contain residual salt and other materials associated with stormwater runoff from streets. It is unclear whether street sweeping constituents differ significantly from those contained in the material cleaned from catch basins, thereby warranting different disposal or reuse methods.

Further, disposal and reuse options for road sand are somewhat limited. The DEP has developed guidance for municipal management practices for the long-term reuse or disposal of road sand sweepings. However, these options are limited to reuse as construction aggregate or, to a lesser extent, use as fill in appropriate locations in accordance with certain parameters (e.g., adequate distance from wetlands, watercourses, and potable water supplies; less than 100 cubic yards in any one location). Again, it is unclear if these reuse and disposal guidelines can be applied to catch basin materials.

Research: Assess the constituents contained in street sweepings and catch basin materials in typical samples taken from urban, suburban, and rural areas. Determine the extent to which these materials differ based on source (street sweeping vs. catch basin) and geographic location (urban/suburban/rural). Recommend feasible, appropriate, and cost-effective methods of beneficial reuse or disposal of materials, if necessary based on source, geographic location, and/or constituents of concern.

For additional technical information please contact Mary-beth Hart, Office of Long Island Sound Programs, 860-424-3621

EVALUATING THE CHEMICAL AND PHYSICAL PROPERTIES OF LIS DREDGED SEDIMENTS IN EXISTING UPLAND DISPOSAL SITES, AND THEIR POTENTIAL FOR USE AS A SAFE AND PRODUCTIVE TOPSOIL

Background: Approximately 500,000 CY of sediments dredged from the waterways of LIS must be managed every year. While historically most of this has been placed at open water sites in LIS, several localities have placed these sediments upland. Much of this is fine-grained sand, silt, and clay with low levels of contaminants. This research would examine the chemical and physical properties of these upland sediments and determine if these sediments could be amended to produce a safe, productive, and commercially viable topsoil. Successful reuse of these sediments would free up space in existing disposal locations and beneficially reuse a material that was viewed as a disposal problem.

Research: Document the physical and chemical characteristics of LIS dredged sediment already disposed of in upland disposal sites and determine the necessary amendments and/or treatments necessary to modify the sediment physical and chemical characteristics for reuse as topsoil. Test plots should be utilized to determine the growing qualities of the manufactured topsoil and information obtained on potential markets for this product.

For additional technical information please contact George Wisker, Office of Long Island Sound Programs, 860-424-3614

EVALUATE HABITAT USE AND DISTRIBUTION OF SALTMARSH SHARP-TAILED SPARROW IN CONNECTICUT

Background: The global population and distribution of the saltmarsh sharp-tailed sparrow (*Ammodramus caudacutus*) has decreased. A large percentage of the global population of this species occurs in Connecticut in coastal tidal marsh habitats. Recent studies have begun to document the distribution of this species, however, its movement patterns and population viability in Connecticut are not yet understood.

Research: Aspect A--Determine the home range and population movement patterns of the saltmarsh sharp-tailed sparrow in Connecticut. Previous studies have documented several specific locations along CT's coastline where these birds occur, but additional work is needed to refine population estimates, examine connectedness among sites, and refine existing habitat use information. The proposed research should look at the existing literature and build upon it rather than repeat the studies in areas that have already been examined in detail. Some locations used by this species may not be state-owned areas. In addition to wetland acreage, the researcher should also describe the habitats using standard conventions such as the NWI system (including halinity modifiers), and the new plant community classification system developed by CTDEP's Environmental Geographic Information Center when detailing habitat use information. Use of radio telemetry to document bird movements will require a permit from the DEP Wildlife Division.

Aspect B-- Examine the social cues utilized by saltmarsh sharp-tailed sparrows that attract birds to suitable habitat. Develop a technique that may improve saltmarsh restoration efforts by attracting birds to "empty" habitats through the use of these social cues.

For additional technical information contact Jenny Dickson, Wildlife Division, at 860-424-8130.

Frequently Asked Questions about the Long Island Sound License Plate Program Grant Application Process



A program of the
Connecticut Department of Environmental Protection

Administered by the
Office of Long Island Sound Programs
Examples of Eligible Activities

Public Access

- ◆ Construction of viewing platforms, boardwalks, fishing piers, boat launch ramps, transient dockage, in-water canoe and kayak and waterside trails, and park improvements to provide new and improved access.
- ◆ Purchase of coastal properties for open space and public recreational access to the waterfront.
- ◆ Boat purchases including sailboats for the disabled and canoes for urban stewardship programs.
- ◆ Creation and distribution of coastal public access guides identifying the facilities available at each site.

Education

- ◆ Educational brochures, publications, posters and videos about Long Island Sound and its resources.
- ◆ Hands-on projects such as water quality monitoring, estuary and river watch programs, coastal beach clean-ups and storm drain stenciling.
- ◆ Installation of interpretive environmental education signs at various public access locations.
- ◆ Purchase of equipment for educational facilities including laboratories, learning centers and museums.

Research

- ◆ Studies about coastal invasive plant and animal species.
- ◆ Studies to obtain more information about endangered species living in or migrating to coastal Connecticut.
- ◆ Studies to obtain information about critical migratory shorebird foraging areas and nesting habitats.
- ◆ Social research relating to Long Island Sound and its natural, recreational and scenic resources.

Habitat Restoration

- ◆ Dune grass planting to preserve and protect dune habitats for nesting birds and to prevent erosion.
- ◆ Construction of fish ladders to restore riverine migratory corridors for anadromous fish.
- ◆ Removal of invasive plant species and planting of native vegetation to attract wildlife.

Information to Include

Q: If I apply for a Public Access project, do I need to provide public access to everyone?

A: Yes. Project sites must provide full public access and public access signs, and may not be restricted by a “residents only” policy. Projects providing free admission and parking facilities are given priority over those that charge a fee.

Q: Do I need to provide copies of a deed or express written permission from the property owner if my project involves a specific piece of property?

A: Yes.

Q: Do I need to obtain federal, state and local authorizations prior to applying for funds?

A: No. However, projects selected for funding which require regulatory authorizations or approvals will be awarded contingent upon first obtaining these authorizations. Projects with approvals in place at the time of application will be given priority consideration.

Q: Must I meet the applicable requirements of the Americans with Disabilities Act and the State Building Code?

A: Yes, for both indoor and outdoor projects.

Q: Must the project be located in Connecticut?

A: Yes. If the project involves a specific site or study area, it must be located in Connecticut or within Long Island Sound. However, organizations located outside of Connecticut may qualify for funding if the project is demonstrated to have a clear connection to Long Island Sound or its resources.

Q: Does the project need to relate to Long Island Sound?

A: Yes. The project must relate directly to Long Island Sound, its watersheds, tributaries, or resources.

Types of Expenses Allowed

Q: Will the grant fund indirect costs?

A: No. Indirect (administrative and overhead) costs are not eligible expenses. Applicants are encouraged to use indirect costs as matching funds.

Q: My project includes water quality monitoring activities. Do I need to follow standard DEP protocols for conducting these activities?

A: Yes. Although the applicant is not be required to obtain an EPA approved QAPP, it is suggested that applicants visit EPA’s website at www.epa.gov/volunteer/qappcovr.htm to obtain information about how to design and implement a water quality monitoring project. It is strongly encouraged that applicants include a description of the specific water quality monitoring protocols in the project proposal.

Q: Will the grant provide stipends for graduate students conducting research?

A: Yes.

Q: Are food and clothing eligible expenses?

A: No.

Q: Are large-ticket items such as computers, televisions, projectors, VCRs or boats eligible expenses?

A: Yes. However, these items **MUST** be part of an overall program, and not simply outright equipment purchases for existing programs.

Q: Will the grant fund a portion of larger projects such as boardwalks, fishing piers, fish ladders, coastal land acquisition and the associated engineering and legal fees?

A: Yes. The applicant should provide documentation that funds are available to cover the balance of any larger project or purchase.

Q: Will the grant fund tidal wetland restoration projects, lobster research, greenways improvements or other activities for which there are alternate funding sources available?

A: In general, the LIS Fund strives to fund projects for which there are no other funding sources. In cases where there are specific programs set up to fund those activities or research projects, applicants are generally encouraged to pursue those opportunities.

Submitting Your Proposal

Q: Can I submit more than one proposal?

A: Yes, but each must be for a different project. The recommended upper limit per project is \$25,000.

Q: Will you accept amendments to my submitted proposal?

A: Amendments will not be accepted after the deadline unless requested by the Department.

Q: How many copies of my proposal do I need to mail?

A: One original plus five copies, including all attachments and photos.

Q: Does my proposal need to be in your office by the deadline or post marked by that date?

A: Complete proposals must be received by 4:30 P.M. on the day of the deadline. No postmarked copies or amendments will be accepted after the deadline. All late proposals will be returned to the applicant.

Q: Can I hand deliver my proposal?

A: Yes. It must be delivered at the Office of Long Island Sound Programs reception area by the deadline in the Request for Proposals. *Proposals will not be accepted after 4:30 P.M.*

Q: Does the Long Island Sound Fund have a web page?

A: Yes. It can be found at: www.ct.gov/dep/lislicenseplate

If you have additional questions, please contact: Kate Hughes Brown, LIS Fund Coordinator

Phone: (860) 424-3652

e-mail: kate.brown@po.state.ct.us

Long Island Sound Fund

Office of Long Island Sound Programs

Department of Environmental Protection

79 Elm Street

Hartford, CT 06106-5127

Preserve the Sound Plates

Q: How much does a *Preserve the Sound* license plate cost?

A: You can order an off-the-shelf plate for just \$50.00, or you may transfer your current marker plate to the *Preserve the Sound* background for just \$70.00. For an off-the shelf plate, \$35.00 goes to the LIS Fund. For special order plates, \$50.00 goes to the LIS Fund.

Q: How many projects has the Long Island Sound Fund supported to date?

A: The Long Island Sound Fund has provided over \$4.7 million in funding for over 300 projects since grants became available in 1993.

Q: Can I get a vanity plate on this background?

A: Yes. A *Preserve the Sound* vanity plate will cost \$70.00, plus the DMV's standard vanity plate fee.

Q: Do I have to wait until my current registration expires, or can I order the plate at any time?

A: You can order the plate at any time. A new registration sticker will come on your *Preserve the Sound* plate.

Q: Do I have to wait in line at the DMV, or can I just order the plate through the mail?

A: You can save time by ordering your plate through the mail at any time. Call 1-800-CT-SOUND to request an order form.